

**Part III Form 2
Section 11. ANNUAL REPORT.**

Drinking-Water System Number:	220001423
Drinking-Water System Name:	KENORA AREA WATER TREATMENT PLANT
Drinking-Water System Owner:	CITY OF KENORA
Drinking-Water System Category:	LARGE MUNICIPAL RESIDENTIAL
Period being reported:	JANUARY 1, 2006 – DECEMBER 31, 2006

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> City Hall – 1 Main Street South City of Kenora – Website http://www.kenora.ca Kenora Water Treatment Plant – 9 7th Street South </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [<input type="checkbox"/>] No [<input type="checkbox"/>]</p> <p>Number of Interested Authorities you report to: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [<input type="checkbox"/>] No [<input type="checkbox"/>]</p>
---	--

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Rocky Heights Distribution System	N/A

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water? Yes [] No []

Indicate how you notified system users that your annual report is available, and is free of charge.

Public access/notice via the web

Public access/notice via Government Office

Public access/notice via a newspaper

Public access/notice via Public Request

Public access/notice via a Public Library

Public access/notice via other method _____

Describe your Drinking-Water System

The Kenora Water Treatment Plant is categorized as Large Municipal Residential. It is designated a Class III plant. The total number of service connections at this time is 6440, with 5,268 currently active, 260 seasonal and 912 inactive. The water plant has a rated capacity of 292 Litres per second. The process is chemically assisted and includes filtration to meet the treatment requirements of O.Reg 170/03 for surface water. The plant uses chloramination to provide secondary disinfection prior to distribution.

List all water treatment chemicals used over this reporting period

Chlorine, Ammonium Sulphate, Aluminum Sulphate, Polyelectrolyte, Sodium Hydroxide, Sodium Silicofluoride.

Were any significant expenses incurred to?

Install required equipment

Repair required equipment

Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

Ventilation/dust control system installed in chemical room.
Mould removal project at Water Treatment Plant.

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit	Corrective Action	Resolution Date
Jan 24/06 133 Mascott Avenue	Combined Chlorine <0.25 mg/L	0.14C 0.13C	mg/L	Flushed mains/pipes. Resampled. Disinfection restored. One set of precautionary microbiological samples were taken.	Feb 2/06 Bleeder installed in home. Subsequent follow-up chlorine tests show residual holding.
Jan 27/06 134 Mascott Avenue	HPC >500 CFU/ml	1700	CFU/ ml	Adverse occurred during follow-up testing to previously listed adverse at 133 Mascott. Flushed mains, and took 2 consecutive days of bacteriological tests.	Feb 3/06 It is possible original sample was contaminated by water from the hot water tank. Subsequent HPC samples for a different tap in the same house showed 0 CFU/ml.
Mar 1/06 Water Treatment Plant	Filter Effluent Turbidity >1 NTU	>2	NTU	Alum and Polyelectrolyte pumps failed. Pump problem rectified. Increased post chlorine and alum. Monitored turbidities and disinfection levels until plant returned to normal operation.	Mar 2/06

Drinking-Water Systems Regulation O. Reg. 170/03

Jun 18/06 Lake line break / repair. Norman and Keewatin affected.	Negative pressure occurred in line during repair process.	N/A	N/A	Boil water advisory issued. Flushed line after repairs until acceptable chlorine residual was obtained. Two consecutive days of bacteriological testing was completed before lifting boil water advisory.	Jun 26/06
Oct 4/06 612 7th Ave South	Combined Chlorine <0.25 mg/L	0.05C	mg/L	Flushed mains/pipes. Resampled. Disinfection restored. Microbiological samples were taken. Residents were advised to boil water until adequate disinfection was restored.	Oct 18/06 Problem may have been caused by a change in flow through the distribution system when valves were closed and flow redirected for a repair.

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli or Fecal Results (#-#)	Range of Total Coliform Results (#-#)	Number of HPC Samples	Range of HPC Results (#-#)
Raw	52	0 – 4 E.C. 0 – 20 F.C.	0 – 3300	0	N/A
Treated	58	Absent	Absent	58	0 – 2
Distribution	465	Absent	Absent	142	0 – 310 *one sample of 3300 during June 18th B.W.A.

Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (#-#)	Online Number of Grab Samples	Range of Results (#-#)
Turbidity	365	0.024 – 0.096 NTU	8760	0.024 – 0.193 NTU *Effluent turbidity spiked to 1.499 on March 1/06 during an adverse which is listed above.
Chlorine	365	1.71 – 2.53 mg/L combined chlorine	8760	Chlorines are continuously monitored online, but due to spiking and other unavoidable operational factors it is difficult to state an accurate range. Online readings are physically recorded once daily at the same time as our grab samples. The range of these readings is 1.35 – 2.45 mg/L.
Fluoride (If the DWS provides fluoridation)	365	0.41 – 0.77 mg/L	8760	0.48-0.75 *Readings dipped to 0.02 during periods when fluoride feed was shut off for repairs.

*NOTE: Record the unit of measure if it is **not** milligrams per litre.*

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
Nov 3/2004	Total suspended solids	Monthly 2006	12.60 (Average for 2006)	mg/L

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Feb 27/2006	<1.00	ug/L	No
Arsenic	Feb 27/2006	<1.00	ug/L	No
Barium	Feb 27/2006	10.0	ug/L	No
Boron	Feb 27/2006	<50.0	ug/L	No
Cadmium	Feb 27/2006	<0.10	ug/L	No
Chromium	Feb 27/2006	<1.00	ug/L	No
Lead	Feb 27/2006	<1.00	ug/L	No
Mercury	Feb 27/2006	<0.10	ug/L	No
Selenium	Feb 27/2006	<5.00	ug/L	No
Sodium	Jan 31/2005	7.75	mg/L	No
Uranium	Feb 27/2006	<5.00	ug/L	No
Fluoride	Feb 27/2006	0.58	mg/L	No
Nitrite	Feb 27/2006	<0.02	mg/L	No
	May 1/2006	<0.02	mg/L	No
	Aug 9/2006	<0.02	mg/L	No
	Oct 30/2006	<0.02	mg/L	No
Nitrate	Feb 27/2006	0.20	mg/L	No
	May 1/2006	0.12	mg/L	No
	Aug 9/2006	0.03	mg/L	No
	Oct 30/2006	0.09	mg/L	No

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Feb 27/2006	<0.10	ug/L	No
Aldicarb	Feb 27/2006	<9.00	ug/L	No
Aldrin + Dieldrin	Feb 27/2006	<0.02	ug/L	No
Atrazine + N-dealkylated metabolites	Feb 27/2006	<0.20	ug/L	No
Azinphos-methyl	Feb 27/2006	<0.10	ug/L	No
Bendiocarb	Feb 27/2006	<0.20	ug/L	No
Benzene	Feb 27/2006	<0.50	ug/L	No
Benzo(a)pyrene	Feb 27/2006	<0.01	ug/L	No
Bromoxynil	Feb 27/2006	<0.20	ug/L	No
Carbaryl	Feb 27/2006	<0.20	ug/L	No
Carbofuran	Feb 27/2006	<0.20	ug/L	No
Carbon Tetrachloride	Feb 27/2006	<0.50	ug/L	No
Chlordane (Total)	Feb 27/2006	<0.30	ug/L	No
Chlorpyrifos	Feb 27/2006	<0.10	ug/L	No

Cyanazine	Feb 27/2006	<0.10	ug/L	No
Diazinon	Feb 27/2006	<0.10	ug/L	No
Dicamba	Feb 27/2006	<0.20	ug/L	No
1,2-Dichlorobenzene	Feb 27/2006	<0.50	ug/L	No
1,4-Dichlorobenzene	Feb 27/2006	<0.50	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Feb 27/2006	<0.40	ug/L	No
1,2-Dichloroethane	Feb 27/2006	<0.50	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Feb 27/2006	<0.50	ug/L	No
Dichloromethane	Feb 27/2006	<0.50	ug/L	No
2-4 Dichlorophenol	Feb 27/2006	<0.50	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Feb 27/2006	<0.20	ug/L	No
Diclofop-methyl	Feb 27/2006	<0.20	ug/L	No
Dimethoate	Feb 27/2006	<0.10	ug/L	No
Dinoseb	Feb 27/2006	<0.20	ug/L	No
Diquat	Feb 27/2006	<7.00	ug/L	No
Diuron	Feb 27/2006	<10.0	ug/L	No
Glyphosate	Feb 27/2006	<10.0	ug/L	No
Heptachlor + Heptachlor Epoxide	Feb 27/2006	<0.10	ug/L	No
Lindane (Total)	Feb 27/2006	<0.10	ug/L	No
Malathion	Feb 27/2006	<0.10	ug/L	No
Methoxychlor	Feb 27/2006	<0.10	ug/L	No
Metolachlor	Feb 27/2006	<0.10	ug/L	No
Metribuzin	Feb 27/2006	<0.10	ug/L	No
Monochlorobenzene	Feb 27/2006	<0.50	ug/L	No
Paraquat	Feb 27/2006	<1.00	ug/L	No
Parathion	Feb 27/2006	<0.10	ug/L	No
Pentachlorophenol	Feb 27/2006	<0.50	ug/L	No
Phorate	Feb 27/2006	<0.10	ug/L	No
Picloram	Feb 27/2006	<0.20	ug/L	No
Polychlorinated Biphenyls(PCB)	Feb 27/2006	<0.06	ug/L	No
Prometryne	Feb 27/2006	<0.10	ug/L	No
Simazine	Feb 27/2006	<0.10	ug/L	No
THM First Quarter	Feb 27/2006	43.0	ug/L	N/A
THM Second Quarter	May 1/2006	41.0	ug/L	N/A
THM Third Quarter	Aug 9/2006	89.0	ug/L	N/A
THM Fourth Quarter	Oct 30/2006	58.0	ug/L	N/A
THM	Running Annual Average	57.75	ug/L	No
Temephos	Feb 27/2006	<0.10	ug/L	No
Terbufos	Feb 27/2006	<0.20	ug/L	No
Tetrachloroethylene	Feb 27/2006	<0.50	ug/L	No

2,3,4,6-Tetrachlorophenol	Feb 27/2006	<0.50	ug/L	No
Triallate	Feb 27/2006	<0.10	ug/L	No
Trichloroethylene	Feb 27/2006	<0.50	ug/L	No
2,4,6-Trichlorophenol	Feb 27/2006	<0.50	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Feb 27/2006	<0.20	ug/L	No
Trifluralin	Feb 27/2006	<0.10	ug/L	No
Vinyl Chloride	Feb 27/2006	<0.50	ug/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample
THM Quarterly Average	57.75	ug/L	Feb 27/2006 May 1/2006 Aug 9/2006 Oct 30/2006

(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)